State of Alaska ALASKA RETIREMENT MANAGEMENT BOARD

Relating to Private Equity Annual Tactical Plan Resolution 2022-16

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, the Board contracts an independent consultant to provide experience and expertise in asset allocation and other investment matters to come before the Board; and

WHEREAS, the Board has established an asset allocation for the funds that considers earnings and liabilities on a current as well as a future basis; and

WHEREAS, the Board has authorized investment in private equity assets for the State of Alaska Retirement and Benefits Plans; and

WHEREAS, the Board will establish and on an annual basis review, an investment plan for private equity:

NOW THEREFORE. BE IT RESOLVED THAT THE ALASKA RETIREMENT MANAGEMENT BOARD adopts the 2022 Private Equity Annual Tactical Plan.

DATED at Anchorage, Alaska this ______ day of December 2022.

Michael Williams

Chair

ATTEST:

Secretary

ALASKA RETIREMENT MANAGEMENT BOARD

Private Equity Annual Tactical Plan Staff Summary and Overview

Sean Howard, CFA State Investment Officer

Cahal Morehouse State Investment Officer

Key Board Decisions

Determine Investment Objective

- Fund's Purpose
- Governance who makes which decisions?

Determine Asset Allocation

- Strategic
- Tactical

Oversee Implementation

- Manager Structure number and types of manager allocations.
- Manager Selection

Monitor Results

- Are the fund, asset classes and mandates performing as expected?
- Are they achieving objectives?

ARMB Private Equity Program

- Private Equity Overview
- Market Review
- ARMB Portfolio
- 2021 Commitments
- Pacing Model
- Plan Recommendation
- Summary

Overview - Characteristics

Positive Characteristics

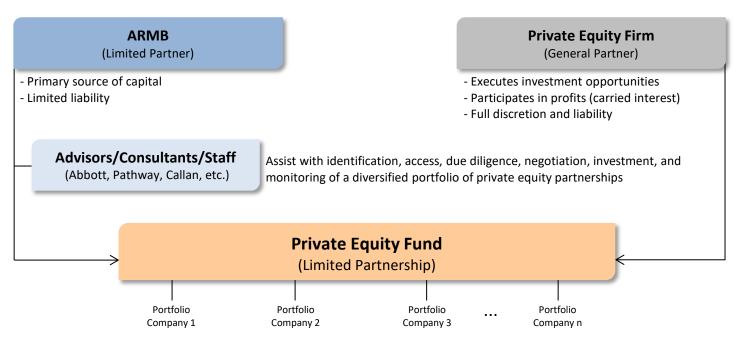
- Larger, more diverse investment universe
- Less efficient companies opportunity to create value
- Less efficient markets pricing opportunities
- Control and alignment of interests
- Managed for longer-term value

Negative Characteristics

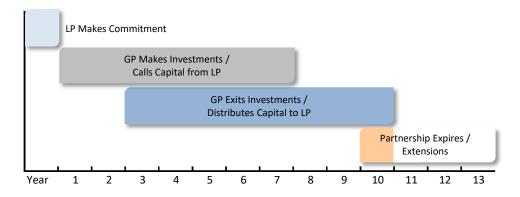
- Illiquid, long-term investments
- High fees and J-curve
- Potential for high leverage
- Portfolio transparency and valuation issues
- Incomplete data and benchmarks

Overview – Structure

Private equity investments are made through limited partnerships.



Typical life cycle of a private equity investment:



Overview – Primary Strategies

Private equity partnerships are classified into three primary groups:

Venture Capital Investments in companies developing new products and services. Value

creation focuses on managing entrepreneurial companies through high

growth. Investments are generally riskier, minority positions.

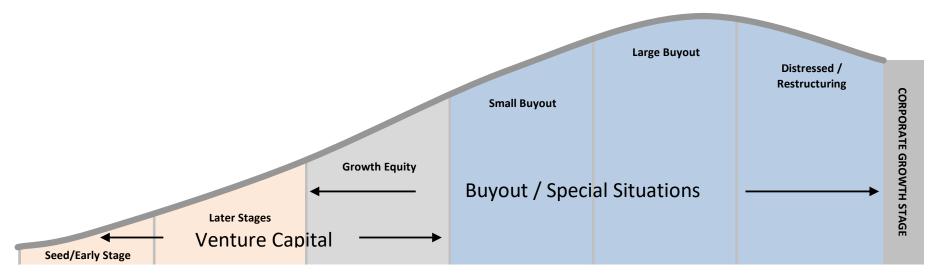
Buyout Control investments in more mature companies. Value creation generally

focuses on driving operational and capital structure efficiency.

Special Situations Generally buyout style investments with a specialty focus; including groups

that have a specific industry, investment style, or capital structure focus.

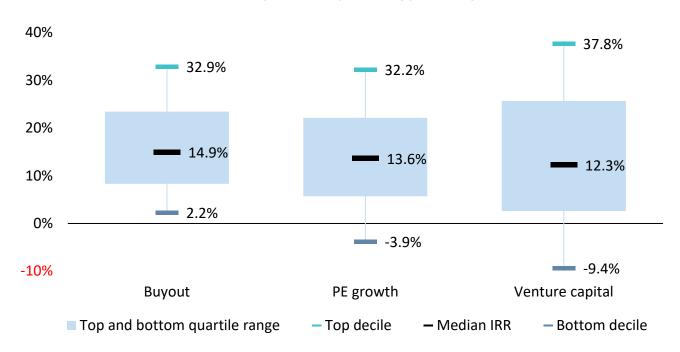
Value creation focuses on specialized skills and efficiency.



Overview – Program Implementation

 Wide performance dispersion leads to opportunities but also makes manager access, selection, and due diligence critical. Consistently investing with high quality managers is key.

Fund Performance Dispersion by Strategy (Vintage Years 2002-2016)



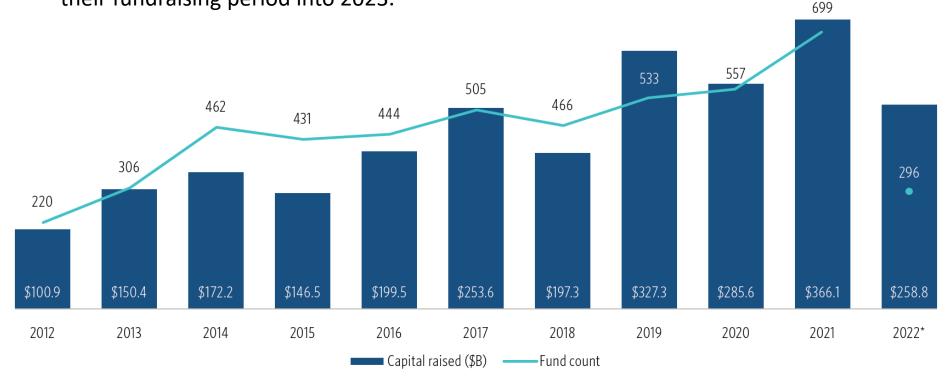
Source: Pitchbook as of December 31, 2021

 The goal is to build a portfolio of quality partnerships diversified by strategy, industry, geography, company stage, manager, and time (vintage year).

Market – Fundraising

- The heightened number of deals over the past year has further shortened the fundraising cycle, bringing many GP's back to market ahead of schedule.
- First time and smaller funds are facing headwinds in raising capital as LP's seek to thin GP relationships in a crowded fundraising environment.

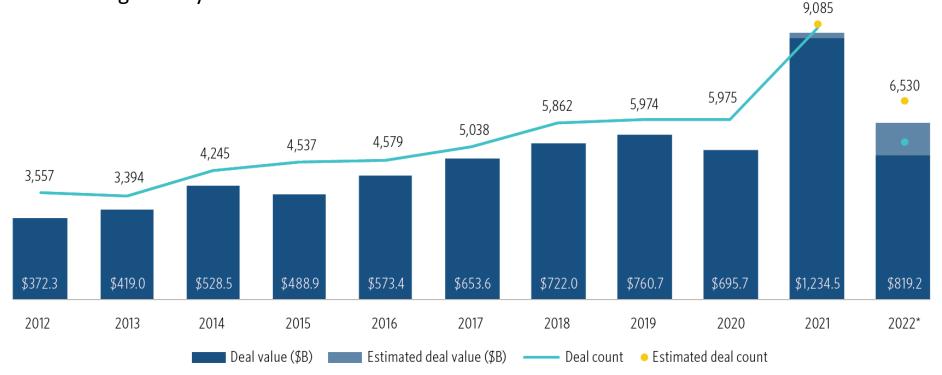
 Many LP's have reached their commitment targets for 2022 and funds are extending their fundraising period into 2023.



Market – Deal Activity

- Deal activity has fallen from the highs of 2021 amid tightening economic conditions but remain in line with longer-term trends.
- Add-on investments make up a growing percentage of deal activity as buy and build strategies increase in popularity – 80% of deals are add-on investments.

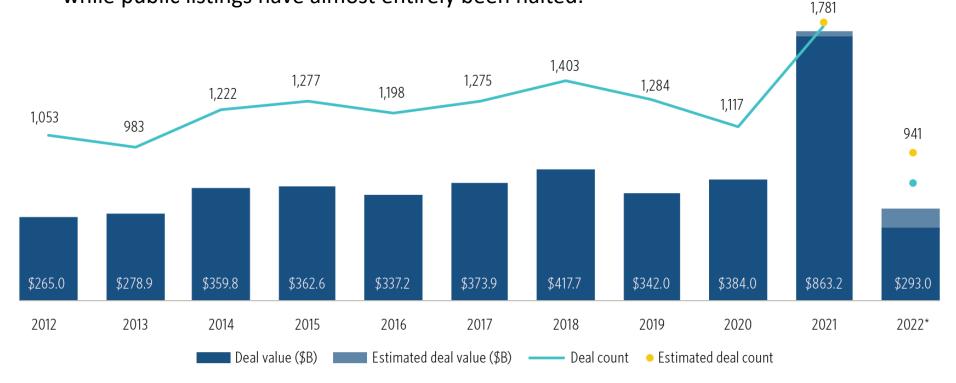
 The increased cost and reduced availability of debt is changing deal structures and slowing activity.



Market – Exit Activity

- Exit activity sharply retracted from last year's record but remains in line with longerterm trends.
- The drawdown in public markets has significantly slowed PE exits while buyer and seller valuation expectations reconverge.

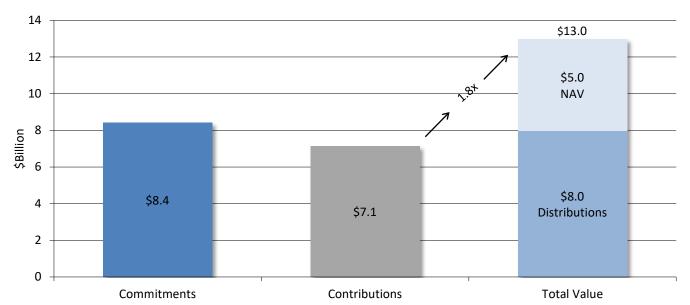
• Exits routes have been equally split between sponsor-backed and corporate acquisitions while public listings have almost entirely been halted.



ARMB Portfolio Performance

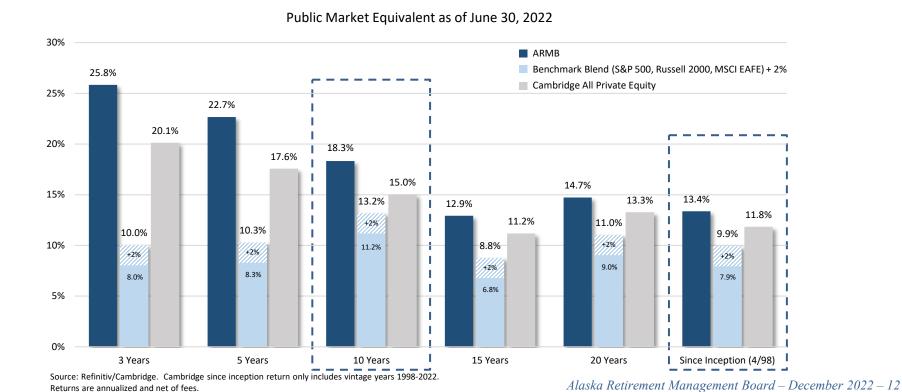
- The ARMB directly invests in private equity and uses gatekeepers, Abbott Capital Management (1998) and Pathway Capital Management (2001). The asset allocation began at 3% and has increased over time to the current level of 14%.
- Overall, the program is in the second quartile with a 13.4% internal rate of return (IRR) and 1.8x multiple on invested capital (MOIC) compared to the Cambridge median IRR of 11.8% and 1.5x MOIC.
- The 10-year time-weighted return for the private equity portfolio is 19.7% versus 9.4% for the PE benchmark blend (1/3 S&P 500, 1/3 Russell 2000, 1/3 MSCI EAFE).

Commitments, Contributions, and Total Value as of June 30, 2022



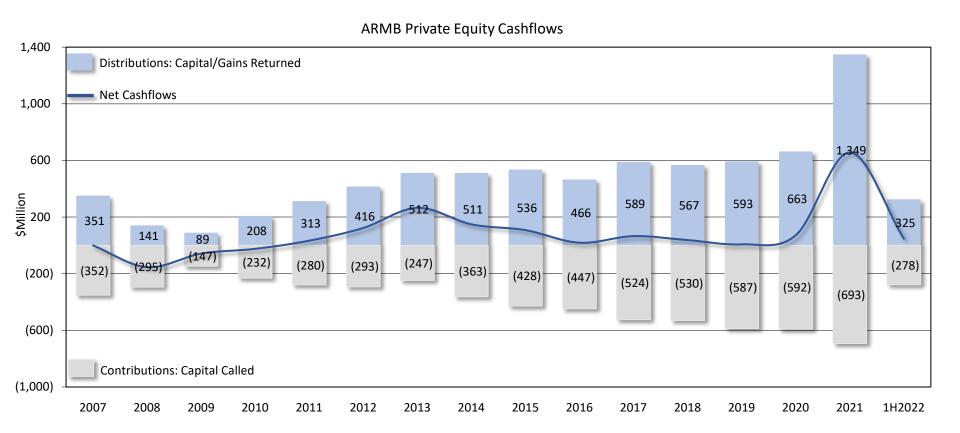
ARMB Public Market Equivalent (PME)

- The ARMB's long-term benchmark for private equity is an equal-weighted blend of the S&P 500, Russell 2000, and MSCI EAFE + 2%.
- Since inception, ARMB's portfolio has delivered a 13.4% internal rate of return (IRR) outperforming both the PME and Cambridge private equity benchmarks.
- Outperformance has generated \$4.2 billion in additional fund value compared to investing in the public markets alone.
- The portfolio's 10-year IRR is 18.3%, outperforming the PME benchmark by over 7%.



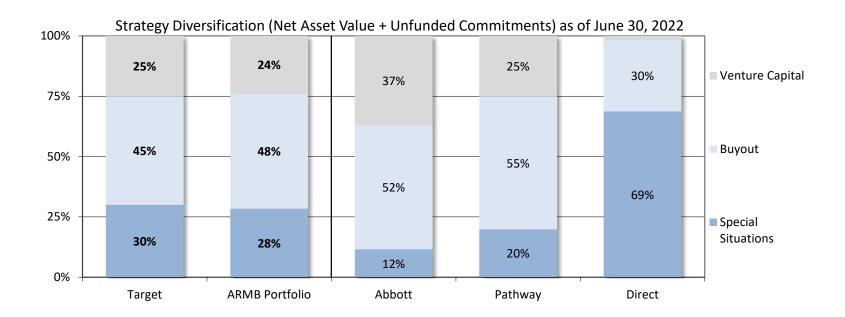
Portfolio Cash Flows

- Net cash inflows over the past five years were \$862 million driven by record distributions received during 2021.
- Contributions and distributions remain steady and elevated over recent years as a result
 of the growth in allocation to private equity and the maturity of the program.



Diversification by Strategy

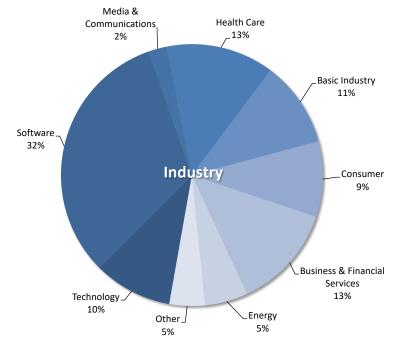
- The portfolio is well-diversified by private equity strategy across venture capital, buyout, and special situations.
- Strategy exposures are within policy bands and near target:
 - Abbott's portfolio is overweight venture capital. Abbott has decreased VC investments in recent years to lower this exposure.
 - The direct partnership portfolio is overweight special situations and underweight venture capital to achieve a strategy allocation which is close to target.

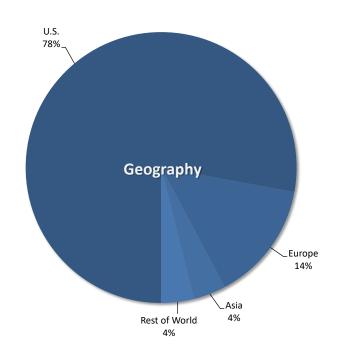


Diversification by Portfolio Company

The portfolio is well-diversified by underlying portfolio companies:

- ARMB's private equity portfolio consists of over 7,000 companies.
- Industry exposure is largely reflective of the broader transaction volume within private equity. Software remains the largest industry weight but also has a higher diversification component due to exposure to a variety of end-markets.
- International investments now account for 22% of the portfolio.





2021 Commitments

- ARMB committed \$581 million of the targeted \$600 million during 2021.
- Pathway's co-investment program made 14 investments totaling \$33 million while Abbott made 5 co-investments totaling \$20 million.
- Commitments were well-diversified by investment strategy and equally split between Abbott, Pathway, and the direct portfolio.

Commitments for 2021 (\$million)

		Actual	Number of	Investment Strategy					
Manager	Target		Number of Investments	Venture	%	Buyout	%	Special Situations	%
Abbott	\$200	\$192	17	\$16	8%	\$156	81%	\$20	10%
Pathway	\$200	\$199	38	\$38	19%	\$111	56%	\$50	25%
Direct	\$200	\$190	5	\$0	0%	\$50	26%	\$140	74%
Total	\$600	\$581	60	\$54	14%	\$317	55%	\$165	36%

Commitments in 2022 are expected to be approximately \$625 million.

Pacing Model

- Staff uses a pacing model to project the forward commitments needed to achieve ARMB's targeted allocation to private equity.
- The illiquid nature and cash flow characteristics of private equity necessitate a forward projection to guide the portfolio towards the target allocation over time.

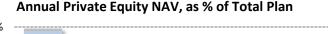
Considerations:

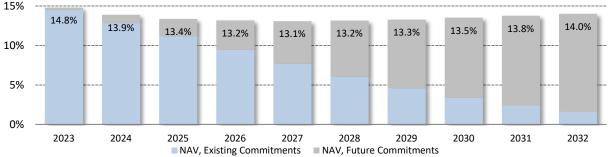
- Denominator effect: sharp declines in liquid asset classes result in over-allocations to illiquid asset classes
- Annual commitment decisions are long-term decisions
- Vintage year diversification



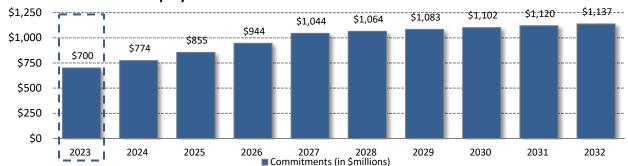
Commitment Pacing Recommendation

- ARMB's long-term allocation target for private equity increased from 12% to 14% at the beginning of FY22.
- Although private equity is above target, an increase in commitment pacing is needed to offset projected distributions and maintain the targeted allocation.
- Staff recommends a 2023 commitment target of \$700 million, split equally between Abbott, Pathway, and direct partnership investments.





Annual Private Equity Commitments



Summary

- ARMB's mature private equity portfolio greatly benefitted from a year in which deal activity and distributions were at historical highs.
- Private markets are not excluded from economic headwinds though staff expects the portfolio to continue to deliver a meaningful return premium over public markets through various market cycles.
- ARMB has a well-diversified private equity program with performance that has had a significant positive impact on the plan.
- Staff will be evaluating ways to improve the structure of ARMB's private equity portfolio with a focus on return/cost efficiency.

Appendix A: 2022 Commitments – Buyout 1 of 2

		•				
Strategy	Partnership Fund	Description	Amount	% Total	Date	Manag
	AHC Co Invest	Global B2C consumer cloud Salesforce consultancy.	\$5,000,000	0.9%	4/26/21	Abbo
	Blue Point - Speedstar Co Invest	Co-investment alongside Blue Point IV in a leading U.Sbased distributor of aftermarket driveline and transmission components.	\$4,000,000	0.7%	11/20/20	Pathv
	CapVest Equity Partners V	Strategy focused on relative value investments across: consumer, industrials, business services, tech & tech infrastructure and healthcare.	\$19,483,260	3.4%	11/23/21	Abb
	Charlesbank X	Value-oriented buyout investments in middle-market businesses based in the U.S.	\$10,000,000	1.7%	1/15/21	Path
	Clearlake - Falcon Co Invest	Co-investment alongside Clearlake VI in a provider of technology-enabled services and software to healthcare organizations.	\$3,000,000	0.5%	9/17/21	Path
	Clearlake - Icon II (Sec)	Single-asset continuation vehicle for a provider of enterprise data integrity software.	\$2,000,000	0.3%	3/19/21	Path
Buyout		Single-asset continuation vehicle for a designer, marketer, and distributor of branded automotive aftermarket parts.	\$2,000,000	0.3%	4/13/21	Path
	Clearlake - Icon IV (Sec)	Single-asset continuation vehicle for a provider of enterprise security solutions software.	\$2,000,000	0.3%	5/14/21	Path
	Clearlake - Icon V (Sec)	Single-asset continuation vehicle for the provider of a leading healthcare, governance, risk, and compliance Software-as-a-Service platform.	\$2,000,000	0.3%	8/27/21	Path
	Genstar Capital Partners X	Control-oriented investments in middle-market companies in the financial services, software, industrial technology, and healthcare sectors.	\$15,000,000	2.6%	4/1/21	Abb
	Genstar Capital Partners X	Control-oriented investments in middle-market companies in the financial services, software, industrial technology, and healthcare sectors.	\$8,500,000	1.5%	4/1/21	Path
	Genstar Capital Partners X	Control-oriented investments in middle-market companies in the financial services, software, industrial technology, and healthcare sectors.	\$25,000,000	4.3%	4/1/21	Dir
	Genstar Capital Partners X Opp	Co-invest alongside flagship fund in middle-market businesses across four core industries: financial services, industrial technology, software, and healthcare.	\$1,500,000	0.3%	8/12/21	Path
	Genstar Capital Partners X Opp	Co-invest alongside flagship fund in middle-market businesses across four core industries: financial services, industrial technology, software, and healthcare.	\$5,000,000	0.9%	4/1/21	Abb
	Great Hill Equity Partners VIII	Predominantly control investments (~75%) in high-growth, middle-market businesses across four broad industry verticals.	\$20,000,000	3.4%	11/1/21	Abb
	Harvest - Granicus Co Invest	Co-investment alongside Harvest VIII in a leading provider of SaaS-based citizen engagement and workflow solutions.	\$4,000,000	10.9%	1/29/21	Path
	Hellman & Friedman Capital Partners X	Buyouts, recapitalizations, and restructurings of large-cap companies across a variety of industries operating primarily in the United States and Europe.	\$20,000,000	3.4%	5/10/21	Abb
	Hellman & Friedman Capital Partners X	Buyouts, recapitalizations, and restructurings of large-cap companies across a variety of industries operating primarily in the United States and Europe.	\$10,130,000	1.7%	5/10/21	Path
	Inflexion Buyout VI	Control buyouts in high-growth, middle-market companies, primarily in the United Kingdom.	\$9,864,240	1.7%	8/20/21	Path
	ISH Co Invest Aggregator	Leading IT management software company.	\$5,250,000	0.9%	4/30/21	Abb

Appendix A: 2022 Commitments – Buyout 2 of 2

Strategy	Partnership Fund	Description	Amount	% Total	Date	Manager
	Nautic - IRC Superman Co Invest	Co-investment alongside Nautic VIII and IX in a provider of kidney dialysis services for patients suffering from end-stage renal disease.	\$3,200,000	0.6%	1/20/21	Pathway
	Nautic Partners X	Buyout, growth, and consolidation investments in middle-market companies in the outsourced services, industrial products, and healthcare sectors.	\$10,000,000	1.7%	7/19/21	Pathway
	Nordic Capital - Vinland Co Invest	Follow-on co-investments alongside Nordic Capital IX in a provider of electronic collection services and analysis of critical patient data for pharma companies.	\$1,495,327	0.3%	4/19/21	Pathway
	Odyssey - Glove Co Invest	Co-investment alongside Odyssey VI in a leading distributor and manufacturer of consumable personal protective equipment.	\$3,330,000	0.6%	2/16/21	Pathway
	Orangewood WWB Co Invest	Quick Service Restaurant (QSR) franchisee.	\$5,100,000	0.9%	10/18/21	Abbott
	Prairie Capital VII QP	Lower middle-market buyouts of predominantly family/founder-owned businesses.	\$10,800,000	1.9%	4/6/21	Abbott
	Quad-C - MNX Co Invest	Co-investment alongside Quad-C X in a provider of specialized logistics services.	\$2,000,000	0.3%	12/9/21	Pathway
Buyout	Quad-C Partners X	Control-oriented investments in acquisitions and recapitalizations of middle- market companies in conjunction with existing management teams.	\$10,000,000	1.7%	6/24/21	Pathway
	Resolute V	Control investments in middle-market companies located primarily in North America.	\$10,000,000	1.7%	3/31/21	Pathway
	Ridgemont - Co Invest III - 2	Follow-on co-investment alongside Ridgemont III in a tech-enabled, third-party logistics provider.	\$331,781	0.1%	12/1/21	Pathway
	Ridgemont - Co Invest III TEC	Tech-enabled business services.	\$705,035	0.1%	11/16/21	Abbott
	Ridgemont - Co Invest Omni	Co-investment alongside Ridgemont III in a tech-enabled, third-party logistics provider.	\$1,320,000	0.2%	2/5/21	Pathway
	Ridgemont Equity Partners IV	Growth buyout investments in middle markets in five sectors: healthcare, technology, infrastructure/power, tech-enabled services, and industrial growth.	\$20,000,000	3.4%	10/29/21	Abbott
	Riverside Micro-Cap Fund VI	Invests in assets with EBITDAs less than \$10 million in software, business services, franchising, niche manufacturing and branded consumer and HC	\$20,000,000	3.4%	8/26/21	Abbott
	Riverside Micro-Cap Fund VI	Invests in assets with EBITDAs less than \$10 million in software, business services, franchising, niche manufacturing and branded consumer and HC	\$25,000,000	4.3%	8/26/21	Direct
	TA XIV	Global growth equity and buyout investments in profitable companies across technology, business and financial services, consumer and healthcare.	\$10,000,000	1.7%	5/27/21	Abbott
	Thomas Bravo - Mirasol Co Invest	Co-investment alongside Thoma Bravo XII, Thoma Bravo XIII, and Thoma Bravo XIV in a provider of a cloud-based software and data analytics for real estate.	\$3,310,000	0.6%	4/16/21	Pathway
	Trident VIII Celestial Co-Invest	Co-investment alongside Trident VIII (Stone Point) in a leading global provider of data and analytics to the real estate and insurance sectors.	\$4,000,000	0.7%	4/20/21	Pathway
	Trident VIII Skopima Co-Invest	Co-investment alongside Trident VIII (Stone Point) in a provider of eDiscovery, document review, risk management, and related consulting services.	\$2,570,000	0.4%	4/27/21	Pathway
	Buyout Subtotals		\$316,889,643	54.6%		

Appendix A: 2022 Commitments – Venture

Strategy	Partnership Fund	Description	Amount	% Total	Date	Manager
	Battery Select I	Follow-on venture capital investments in Battery's highest conviction portfolio companies.	\$4,000,000	0.7%	2/10/21	Pathway
	COCO Growth Holding	Secondary market transaction involving 16 portfolio companies held by three Holtzbrinck Ventures-managed funds.	\$4,017,556	0.7%	12/29/21	Pathway
	CRV XVII	Early-stage technology venture capital fund. The firm seeks investments in highrisk, disruptive technologies across consumer/media, enterprise.	\$1,297,500	0.2%	11/1/21	Abbott
	H 2021 SPV	International fintech super-app.	\$4,300,000	0.7%	4/30/21	Abbott
Venture Capital	Insight - Armis 2 Co Invest	Follow-on co-investment alongside Insight X and XI in a cloud-based cybersecurity platform for managed, unmanaged, and internet of things (IoT) devices.	\$68,056	0.0%	2/16/21	Pathway
	Insight - Armis 3 Co Invest	Follow-on co-investment alongside Insight X and Insight XI in a cloud-based cybersecurity platform for managed, unmanaged, and IoT devices.	\$329,693	0.1%	11/4/21	Pathway
	IVP XVII	Late- and expansion-stage venture capital investments in information technology companies.	\$10,000,000	1.7%	1/20/21	Pathway
	NEA 18	Early-stage venture capital investments in technology and healthcare companies, primarily in the United States.	\$6,000,000	1.0%	12/22/21	Pathway
	NEA 18 VGE	Late-stage venture capital and growth equity investments in technology and healthcare companies, primarily in the United States.	\$4,000,000	0.7%	12/22/21	Pathway
	Oak HC/FT Partners IV	Investments in healthcare and fintech businesses. The remainder of the portfolio will be growth businesses, including a few minority transactions.	\$10,000,000	1.7%	2/17/21	Abbott
	YCCG21	Late-stage investments primarily in companies that have completed the YC accelerator program.	\$10,000,000	1.7%	6/25/21	Pathway
	Venture Capital Subtotals		\$54,012,805	9.3%		

Appendix A:2022 Commitments – Special Situations

Strategy	Partnership Fund	Description	Amount	% Total	Date	Manager
	Centerbridge CP IV	Control-oriented private equity and distressed debt-for-control investments in a variety of industries.	\$10,000,000	3.3%	1/30/20	Pathway
	Clearlake Capital Partners VII	Control Investments in special situations, distressed in middle market technology, industrial, and consumer sevices.	\$10,000,000	1.7%	9/17/21	Pathway
	Clearlake Capital Partners VII	Control Investments in special situations, distressed in middle market technology, industrial, and consumer sevices.	\$20,000,000	3.4%	9/17/21	Abbott
	Clearlake Capital Partners VII	Control Investments in special situations, distressed in middle market technology, industrial, and consumer sevices.	\$50,000,000	8.6%	9/17/21	Direct
	Insight Partners X Follow-On	Follow-on investments in existing Insight X portfolio companies.	\$4,000,000	0.7%	3/31/21	Pathway
Special Situations	Insight Partners XII	Growth-stage investments in companies operating in the software, software- enabled services, and internet sectors.	\$6,000,000	1.0%	5/14/21	Pathway
	Insight Partners XII	Growth-stage investments in companies operating in the software, software-enabled services, and internet sectors.	\$40,000,000	6.9%	5/27/21	Direct
	Summit GE XI	Minority, control, and expansion growth equity investments primarily in the United States.	\$10,000,000	1.7%	10/1/21	Pathway
	Summit GE XI	Minority, control, and expansion growth equity investments primarily in the United States.	\$50,000,000	8.6%	9/3/21	Direct
	TA XIV	Growth-focused investments in rapidly growing companies in North America and Europe in a variety of sectors.	\$10,000,000	1.7%	5/27/21	Pathway
	Special Situations Subtotals		\$210,000,000	36.2%		
Abbott Subtotal			\$191,935,795	33.0%		
Pathway Subtotal			\$198,966,653	34.3%		
Direct Subtotal			\$190,000,000	32.7%		
TOTAL (\$MM)			\$580,902,448	100.0%		